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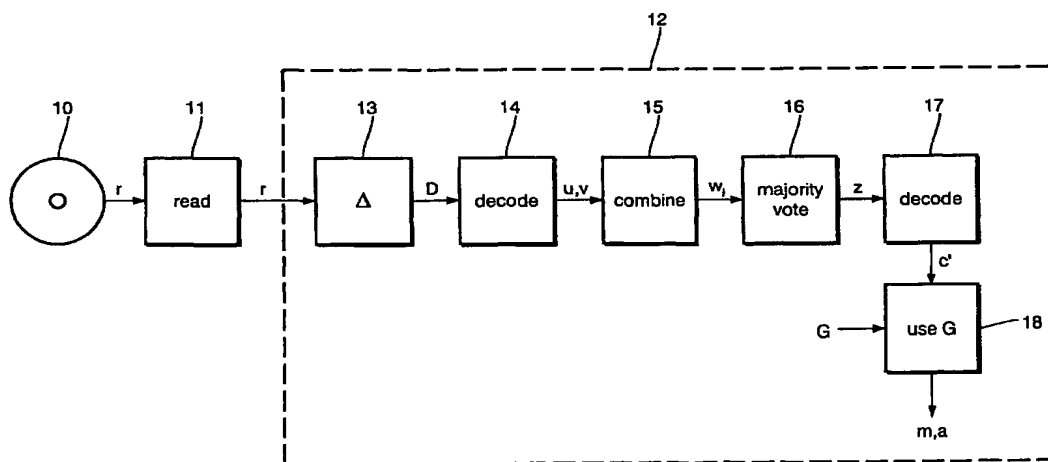
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(54) Title: METHOD OF JOINT DECODING OF POSSIBLY MUTILATED CODE WORDS



(57) **Abstract:** The invention relates to a method of decoding possibly mutilated code words (r) of a code (C), wherein an information word (m) and an address word (a) are encoded into a code word (c) of said code (C) using a generator matrix (G) and wherein said address words (a) are selected such that address words (a) having a known relationship are assigned to consecutive code words (c). To provide a reliable way of decoding making use of the known relationship, a method comprising the following steps is proposed: decoding the differences (D) of a number ($L-1$) of pairs of possibly mutilated code words (ri , $ri+1$) to obtain estimates (u , v) for the differences of the corresponding pairs of code words (ci , $ci+1$), combining said estimates (u , v) to obtain a number (L) of at least two corrupted versions (w_j) of a particular code word (c), forming a code vector (z) from said number (L) of corrupted versions (w_j) of said particular code word (c) in each coordinate, decoding said code vector (z) to a decoded code word (c') in said code (C), and- using said generator matrix (G) to obtain the information word (m) and the address word (a) embedded in said decoded code word (c').

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